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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/781,387	02/18/2004	Gibong Jeong	TI-36602	1921
23494	7590	10/03/2007	EXAMINER	
TEXAS INSTRUMENTS INCORPORATED			TRAN, PHUC H	
P O BOX 655474, M/S 3999			ART UNIT	PAPER NUMBER
DALLAS, TX 75265			2616	
NOTIFICATION DATE		DELIVERY MODE		
10/03/2007		ELECTRONIC		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>
	10/781,387	JEONG ET AL.
	Examiner PHUC H. TRAN	Art Unit 2616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 18 February 2004.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-35 is/are pending in the application.
  - 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) 8-13 and 16-28 is/are allowed.
- 6) Claim(s) 29-31 and 33-35 is/are rejected.
- 7) Claim(s) 1-7,14,15 and 32 is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.
 

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
    - a) All    b) Some \* c) None of:
      1. Certified copies of the priority documents have been received.
      2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
      3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date: _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date: _____   | 6) <input type="checkbox"/> Other: _____                          |

**DETAILED ACTION**

***Claim Objections***

1. Claims 1-7 and 32 are objected to under 37 C.F.R 1.75 because of the following formalities: In claim 1 line 6, "a time stamp" seems to refer back to "the time stamp" recited at line 4. If this is true; it is suggested to change " a time stamp" to --- the time stamp ---. The same is true with the term " modem" recited in claim 32.

Claims 2-7 are objected since they depend from 1.

***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:  
  
The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
3. Claims 1-7 and 14-15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1 line 4, " the time stamp" has no antecedent basis. The same is true with the term "the modem's transmission" recited in claim 14 line 2.

Claims 2-7 and 15 are rejected since they depend from 1 or 14.

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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5. Claims 29 and 33 are rejected under 35 U.S.C. 102(b) as being anticipated by Trachwsky et al. (6,993,101).

- With respect to claim 29, Trachwsky et al. disclose a method of determining a start of a transmitted frame in a frame based communications network comprising:

a modem (See box 16 in figure 1d) coupled to a radio frequency (RF) circuit, the modem containing circuitry to encode and modulate a data stream to provide to the RF circuit for data transmission purposes (see box 500 in figure 30) and demodulate and decode a received signal from the RF circuit for data reception purposes, wherein the modem implements a first version of a technical specification (see box 90 in figure 30); and a coprocessor coupled to the modem and the RF circuit, the coprocessor containing circuitry to encode and modulate a data stream to provide to the RF circuit for data transmission purposes and demodulate and decode a received signal from the RF circuit for data reception purposes, wherein the coprocessor implements a second version of the technical specification (see boxed 900 and 500 in figure 30).

***Claim Rejections - 35 USC § 103***

6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

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7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 30-31 and 34-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Trachewsky.

- With respect to claims 30-31 and 34-35, Trachewsky discloses all the subject matter of the claimed invention with the exception of the second version being a superset of the first version, and the system being a UMTS or CDMA in a communications network. However, the second version being a superset of the first version, and the system being a UMTS or CDMA are well known in the art. Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to use the second version being a superset of the first version, and the system being a UMTS or CDMA in the communications network of Trachewsky for the purpose of adapting to the different kind of version in the communication network.

*Allowable Subject Matter*

9. Claims 1-7 and 14-15 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

For claims 1-7, the prior art fails to teach a combination of: at a coprocessor, generating a synchronization strobe as a response to a triggering event; determining a time difference based

upon the time stamp; at a modem, saving a time stamp when the synchronization strobe is received; and providing the time stamp to the coprocessor.

10. Claims 8-13,16-28 are allowed.

For claims 8-13 and 16-28, the prior art fails to teach a combination of :

a sync and tracking unit coupled to a transmission input, the sync and tracking unit containing circuitry to synchronize the circuit to a timing of a transmission provided by the transmission input; a matched filter coupled to the sync and tracking unit, the matched filter containing circuitry to determine the timing of the transmission; a sub frame generator containing circuitry to create a data unit for transmission on the additional channel; and a data generation unit coupled to the transmission input, the sync and tracking unit, and the sub frame generator, the data generation unit containing circuitry to encode and modulate the data unit and to insert the data unit into the transmission.

11. Claims 32 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

### *Conclusion*

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Apple et al. (2007/0073585) is cited to show a system which is considered pertinent to the claimed invention.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to PHUC H. TRAN whose telephone number is (571) 272-3172. The examiner can normally be reached on M-F (8-4:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, CHI PHAM can be reached on (571) 272-3179. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Phuc Tran  
Assistant Examiner  
Art Unit 2616

P.t  
9/25/07

  
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9/27/07